

http://energy.gov/diversity/stem-mentoring-caf

## OVERVIEW of STEM MENTORING CAFÉ MODEL

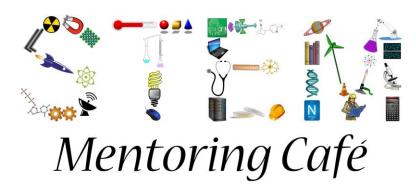
To help engage middle-school students and science, technology, engineering, and mathematics (STEM) professionals around the country, in 2014 the Departments of Energy and Education, along with the Association of Science-Technology Centers, started **STEM Mentoring Cafés.** At a Café, STEM professionals engage in quick-show-and-tell chats about their STEM careers and impact on society. They rotate tables throughout the event, allowing students to engage with many different STEM professionals. The event is open to everyone, but the Café is *especially geared towards reaching girls and female STEM professionals* to combat their underrepresentation in STEM. All of these events are hosted at volunteer ASTC sites throughout the country, who determine the capacity of the event based on their space. Cafés can be held from 10am – 12pm to engage students in school or from 3-5pm to engage afterschool communities. The following information describes the role of mentors, teachers, students, and museums in planning and participating in a Café event.

#### **ROLE of STEM MENTORS**

We ask federal STEM professionals, in particular women from Department of Energy National Laboratories and federal agencies to be STEM mentor participants on the day of the event. We work whenever possible to engage women in the Department of Energy's <u>Women @ Energy</u> series (<u>www.energy.gov/womeninSTEM</u>) to attend Café events. The professional comes with show-and-tell items to provide an interactive experience. The STEM professionals are responsible for sharing how they got their start in STEM, what interests them the most about their job, what exciting projects they have currently, and why STEM matters to our society. At each Café we recruit two mentors for groups of 6-8 students. Mentor participants are in a variety of STEM fields. STEM professionals commit to serving an additional 20 hours annually as a mentor to students in their community. Mentors volunteer their contact information and share a headshot to include in our student workbook for the events. When a STEM Mentoring Café is held at a location that is not near a Department of Energy National Laboratory, mentors are recruited from energy and STEM private sector and nonprofit organizations.

## **ROLE of TEACHERS and STUDENTS**

We seek a student teacher ratio of approximately 5:1 at each event. Please note that this ratio may vary depending on location capacity. Alternatively, teachers could bring entire classrooms – this will be determined by the host's preference and community needs. Teachers are asked to bring photo permission slips for the students to the event (provided by the Department of



Energy), and to brief their students before the event about what STEM is and who they will be meeting with at the event. Teachers are provided take-home material to help engage their students in STEM learning in the classroom. Teachers are also provided contact information for STEM professionals to encourage other engagements with the STEM professionals beyond the day of the event. Teachers will be asked to fill out a survey following the event to collect feedback, and students will be asked to fill out an event report card at the event. Teachers are asked to remain with their students during the event to listen to the conversations between the students and the mentors. Students are asked to come prepared to ask questions to the mentors and fill out workbooks during the event to track their lessons learned and take-aways from their conversations.

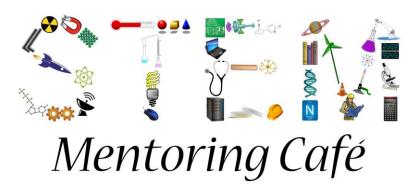
#### **ROLE of MUSEUM**

Museums volunteer to host the event at no cost to the Department of Energy. Museums are asked to provide support that includes:

- Working with the Federal STEM Mentoring Café team to select a date and time for the event and the event capacity
- Coordinating logistics including sharing directions/instructions for entry to the building, parking, access to restrooms, signage for entry and the tables, etc.
- Tables that can seat 6-10 people (2 mentors and up to 8 students)
- Speaking podium and microphone
- Coordinator for planning and day of event facilitation
- Providing a welcome speaker
- Facilitating marketing materials and external communications in partnership with the Department of Energy
- Invitations to local students and teachers (optional, the National Girls Collaborative Project, HUD, DOE, and Education will all be assisting with this)
- Providing a photographer or videographer if available

## ROLE of STEM MENTORING CAFÉ PLANNING TEAM

The coordinating team will oversee communications between the mentors, teachers, and museum hosts, marketing and communication for the day of the event with ASTC and the federal government, and overall Café messaging strategy. The team will work to secure a keynote speaker for the event to provide brief remarks before the start of the mentoring sessions. The Team will also facilitate with coordination for the day of the event by identifying teachers, students and the ASTC location. The team will provide sample resources to be modified as needed, including STEM workbook for students to capture and highlight what and who sparked their interest in STEM, and take-home resources from ASTC and federal agencies to be used in



the classroom. The planning team will run event follow up and de-briefing with teachers and the museum to ensure a successful foundation for future events.

## **PAST CAFEs**

Learn about previous STEM Mentoring Café events <u>on our website</u> and view video and blog coverage.

# **CONTACT US**

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